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REMARKS

Claims 1-20 are pending in this application. Claims 21-24 have been added.

The Office Action dated March 3, 2004, has been received and carefully reviewed, and the issues raised in that Office Action were discussed with the examiner during a personal interview on June 22, 2004. As an initial matter, the undersigned would like to thank the examiner for the courtesies extended during the interview. Pursuant to MPEP 713.04, a summary of the interview appears below followed by a response to the objections and rejections raised in the Office Action.

INTERVIEW SUMMARY

No exhibits were shown. Claims 1, 8 and 15 were discussed along with proposed new claims 21 and 23, and arguments were presented to distinguish these claims over Chen and Agrawal. No amendments were offered; however, Applicant's representative argued that the prior art failed to show or suggest at least the step of "determining a power which is higher by the predetermined amount than the transmission power, as an optimum value" as required, for example, by claims 1, 8 and 15. No other pertinent matters were discussed.

OBJECTIONS

The abstract of the disclosure was objected to for including more than 150 words. A replacement abstract of the disclosure is submitted herewith that has fewer than 150 words.

CLAIM REJECTIONS

Claim 1 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Agrawal. As discussed during the interview, Chen does not include a step of, in the case of a transmission failure at a transmission power which is gradually reduced by the predetermined amount, determining a power which is higher by the predetermined amount than the transmission power, as an optimum value. Chen does not show or suggest determining a power which is higher by the predetermined amount (i.e., the amount by which the power had been reduced in a previous step) as an optimal power level. Instead, Chen teaches that, upon a transmission failure, the step of "triggering a sharp increase in the transmit power" (column 6, lines 46-50). This "sharp increase" may be, for example, sixteen times as large as the previous decrease (column 7, lines 63-65). This shortcoming of Chen is not addressed by Agrawal or the other references of record.

Moreover, Chen does not disclose a step of determining a power which is higher by the predetermined amount as an optimum value as

required by claim 1. While Agrawal is cited to show "an optimum value," it is not clear from the Office Action or the cited portions of Agrawal how one skilled in the art would be motivated by Chen in combination with Agrawal to produce the claimed invention. Agrawal in no manner suggests that a power level higher, by the predetermined amount, than the previous power level be determined as an optimum value as required by claim 1, and claim 1 is submitted to further distinguish over the prior art for this reason.

If the above arguments and the discussions at the interview do not overcome this rejection, it is respectfully requested that the examiner provide a more detailed explanation of how he is combining Agrawal with Chen so that the examiner's position can be better understood and addressed in a future Reply.

Claims 2-7 depend from claim 1 and are therefore submitted to be allowable for the same reasons as claim 1. Claim 5 further distinguishes over the prior art by requiring that "in the case where a transmission failure occurs after the optimum transmission power is set, transmission power is raised to the maximum value and resetting of optimum transmission power is carried out." Chen begins transmission at a first power level (123) and raises and lowers transmission power in a given manner, but neither Chen nor the other prior art shows or suggests the steps of 1) transmitting at a maximum power value and 2) raising transmission power to the

maximum power value after a transmission failure occurs. Claim 5 further distinguishes over the prior art for this reason.

Claim 8 includes the limitation "in the case where transmission fails at a gradually reduced transmission power, determining a power higher than the gradually reduced transmission power as an optimum transmission power." Chen and Agrawal do not suggest, after a transmission failure, determining a power level as an optimum power level. Rather, Chen continues to decrease transmission power after sharply raising transmission power and Agrawal discloses an unrelated method of selecting appropriate combinations of transmission power and coding schemes. Claim 8 is submitted to patentably distinguish over Chen and Agrawal for at least this reason. Claims 9-14 depend from claim 8 and are submitted to be allowable for the same reasons as claim 8.

Claim 12 further distinguishes over the prior art by requiring that "in the case where transmission fails after the optimum transmission power is set, transmission power is raised to the maximum value and setting of optimum transmission power is again carried out." Chen begins transmission at a first power level (123) and raises and lowers transmission power in a given manner, but neither Chen nor the other prior art shows or suggests the steps of 1) transmitting at a maximum power value and 2) raising power to the maximum transmission power value after a transmission

failure occurs. Claim 12 further distinguishes over the prior art for this reason.

Claim 15 includes the limitations "in the case where transmission at a transmission power which is gradually reduced by the predetermined amount fails, determining a power higher than the transmission power by the predetermined amount as an optimum transmission power; and, after the optimum transmission power is set, maintaining the optimum transmission power unless any transmission failure occurs." Claim 15 is therefore submitted to be allowable over the prior art for the same reasons as claim 1. Claims 16-20 depend from claim 15 and are therefore submitted to be allowable for the same reasons as claim 15.

Claim 17 further distinguishes over the prior art by requiring that "in the case where transmission fails after the optimum transmission power is set, transmission power is raised to a maximum value and setting of optimum transmission power is again carried out." Chen begins transmission at a first power level (123) and raises and lowers transmission power in a given manner, but neither Chen nor the other prior art shows or suggests the steps of 1) transmitting at a maximum power value and 2) raising transmission power to the maximum power value after a transmission failure occurs. Claim 17 further distinguishes over the prior art for this reason.

Claims 4, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Agrawal and further in view of Hong. Claims 4, 11 and 17 depend from independent claims 1, 8 and 15, respectively, and are therefore allowable for the same reasons as the independent claims from which they depend. Moreover, it is respectfully submitted that Hong fails to address the shortcomings of Chen and Agrawal discussed above, and that therefore, these claims are also distinguishable over the prior art.

New claims 21-24 are submitted herewith. Claims 21 and 23 require, *inter alia*, the steps of:

b) transmitting at least one transmission at the maximum power level;

c) determining whether the at least one transmission was successful or unsuccessful;

d) each time the at least one transmission is successful, reducing the transmission power by a predetermined amount to a subsequent level;

e) repeating steps c and d until the at least one transmission at the subsequent level is unsuccessful;

f) increasing the power level by the predetermined amount to an optimal power level; and

g) transmitting at the optimal power level until at least one transmission at the optimal power level is unsuccessful. The prior

art does not show or suggest a method that includes these steps, and for this reason, and the reasons provided above in connection with claims 1 and 8, it is respectfully submitted that claims 21 and 23, and their dependent claims 22 and 24 are allowable over the prior art.

Each issue raised in the Office Action dated March 3, 2004, has been addressed, and it is believed that claims 1-24 are now in condition for allowance. Wherefore, reconsideration and allowance of claims 1-20 and the examination and allowance of claims 21-24 is earnestly solicited.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott Wakeman (Reg. No. 37,750) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee of \$110.00 is attached hereto.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By



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Attachment(s): New Abstract of the Disclosure